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THE REASONS FOR THE TRAGEDY AT THE CAPE KENNEDY COSMODROME

By An Observer

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Newspapers and journals of our planet, telegraph and information agencies, radio and television companies continue to comment on the tragic death of the three American astronauts who perished in a fire on January 27, during a preflight exercise in the cabin of the spaceship "Apollo-1."

What happened? Details of and technical reasons for the accident remain so far the object of conjecture. According to reports of the Associated Press which quote the leadership of the space center at Houston, "all data will be kept in secret until the investigation procedures are completed." However, even now a number of suppositions which are not unfounded are being expressed.

Thus, official representatives of the National Aeronautics and Space Administration have reported that the fire, which broke out in the cabin ten minutes before the simulated lift-off, was "caused by an ignition of oxygen as a result of some electrical defect."

To the question if this was accidental which was asked by a UPI correspondent, the representative of the Manned Spacecraft Center, Paul Haney, replied, "I am not at liberty to discuss all the details." At the same time, the press published a detailed description of a whole set of circumstances which preceded the tragedy at the Cape Kennedy cosmodrome. What kind of circumstances were these?

At the moment when the fire broke out, the astronauts were breathing oxygen in their spacesuits. The carrier-rocket "Saturn-1B" and the spaceship were supplied with energy by the internal power systems and not from the cosmodrome. Even earlier during this test, the power system of the spaceship was "troublesome." Even during the day (the crew entered the spaceship at 1 P.M. and the fire broke out at 6:31 P.M.) the astronauts had difficulties with their oxygen system.

Trouble within the "Apollo" spaceship had also occurred in the past.

This was reported for the first time in December of last year. At that time, Colonel Grissom said, "We have encountered certain irregularities in the life support control system." The leader of the Apollo program, Joseph Shea, made a statement before journalists on December 15, 1966, to the effect that the "difficulties are continuously plaguing the oxygen-supply system of the spaceship. . . In approximately 82 different units of this system, more than 200 irregularities occurred."

These figures are even more alarming if we take into consideration the fact that an entire series of difficulties also occurred in the preceding "Mercury" and "Gemini" programs. Even then, the New York "Herald Tribune" has expressed its opinion that "each flight contains its drama," and the leadership of NASA has admitted that the "chances for a successful launch comprise only 80 percent." And if at that time the member of the House of Representatives James Fulton reproached the leadership of the program for lack of a "sense of urgency," then at this time the immediate creators of the "Apollo" announced in spite of all facts the following: "Our approach to this program is to work calmly, not to strive for absolute perfection, not to try to make everything too complicated, or otherwise this nation will never leave the launching pad. . ."

This statement was made by Dr. Shea. These words can be interpreted in a number of ways. But, no matter what the case may be, even back in 1959, when it was decided to use a pure oxygen atmosphere in the Mercury capsules, certain American specialists pointed out the possibility of danger.

Reality has confirmed this danger. In 1962, a fire broke out in an oxygen-filled decompression chamber during an experiment at a research center in Philadelphia. Four research technicians suffered serious burns. During that same year, in the course of training at a school for space medicine at Brooks Air Force Base, a fire broke out within an oxygen-filled cabin of a spaceship simulator. At that time, there were two casualties.

"Why, then, did everything remain as it was?" Many Americans ask themselves this question. If we should seek an answer in the statements by the same officials and commentaries by observers from the journal "Newsweek," then it turns out that a "pure-oxygen atmosphere system is lighter and takes up less space and is also simpler and cheaper than equipment for the generation of an oxygen-nitrogen mixture."

Cheaper. . . The flights of many American astronauts took place in difficult and tense circumstances which required extreme courage, strength, and stamina. Their (the astronauts'--JLZ) achievement aroused sincere admiration, and this could not be said about the organizers of the flights. According to communiques by the Associated Press, one of these organizers explains the terrible tragedy as "only the work of the law of averages."

Such a reply hardly satisfies anyone. Observers from various information agencies have again asked the NASA leadership the same questions: "Has everything been done to assure a maximum safety for the astronauts? Is it possible that safety considerations have been sacrificed for considerations of prestige? Was the fire within the 'Apollo-1' cabin an absurd accident, or did it represent a natural result of ignoring problems of safety in the name of a quicker achievement of effective results in the national space program?"

Attempts are now being made to find answers to these questions in the report of the medical fund and the investigations by Lovell which were prepared for NASA back in 1964. But the answers could not be found there. Furthermore, the report underlines the fact that actual studies of the reasons for the fires were evaded and this created a false feeling of security.

Today, the world mourns the death. Virgil Grissom, Edward White, and Roger Chaffee--people of that new profession which, regardless of nationality, has made them representatives of the entire planet in extraterrestrial space. Along with the Soviet cosmonauts, they have paved the road toward the perception of the world which surrounds us, the road toward the conquest of space.

A new crew has been announced for the spaceship "Apollo-1." These are W. Schirra, D. Eisele, and W. Cunningham. When will their flight take place? The "New York Times," answering this question, reports that "a precise continuation of the countdown will depend on the conclusions of the investigating committee, which consists of seven people and which was appointed in order to establish the reasons for the fire which has killed three astronauts and which has caused great damage to the Apollo spaceship. This damage is estimated to be 35 million dollars."

One should not rush in this case. This statement is supported by one more accident which took place on the last day of January at a USAF base

in San Antonio. During a test in a decompression chamber which was filled with pure oxygen, in nearly identical conditions as during the recent tragedy at Cape Kennedy with the "Apollo-1" spacecraft, a fire broke out. Two pilots were killed.

According to a report by a UPI correspondent, this unfortunate accident took place after the disaster at Cape Kennedy, when the American method of using pure oxygen during spaceflights by manned spaceships had already aroused definite doubts. The flame caused such extreme heat that the cabin and equipment smoldered over a period of four hours, and then in the evening flames once again broke out.

Today, the investigation of the "Apollo tragedy" is already being conducted by two commissions--NASA and the Senate. The House of Representatives of the USA is proposing the appointment of a special commission for such an investigation. Official data about the investigations are so far not available. However, some information has already seeped out to the press about tape recordings (from the burning spacecraft--JLZ) and descriptions by an engineer who decoded the conversations between the crew and the Earth during the fatal test. The essence of his reasoning could be reduced to the fact that the astronauts reported the fire three times, but the absence of an automatic device for the immediate opening of a hatch in the Apollo-type spacecraft and the shortage of 90 seconds of time have led to (the astronauts'--JLZ) death.

The Washington correspondent of the New York "Daily News" has expressed an opinion to the effect that the disaster on the Apollo will lead to a slowdown in the accomplishment of a flight to the Moon by approximately two years, if NASA seriously considers a cardinal alteration of the astronauts' life support system.

"Scientists are taking a risk"--this was the heading of an article in the "World Journal Tribune." It is stated in this article that "when the National Aeronautics and Space Administration solved the problem of what type of atmosphere to create in the manned spaceships, it had to select between two types of dangers." However, although many American specialists consider that the atmosphere which is created in the Soviet spaceships is less langerous, NASA, striving to economize, "preferred the danger connected with pure oxygen."

In an attempt to pass up with silence the real reasons for the disaster, a representative of the "North American Aviation" company has tried to justify the accident with the following words: "If the fire which took place on Friday had happened in cosmic space, then the astronauts would possibly (?) have remained alive."

"It is necessary to risk one's life in order to conquer space." So said once the courageous Virgil Grissom. He died on Earth, although on two occasions he came face to face with the silent world of the stars.